

**BRANSON WWTP**

BRANSON, MO

**Operation & Maintenance Manual**

for

**AQUASCREEN® 600 X 3400 X 6****SERIAL # ASC 04-045****DSP 250 COMPACTOR****SERIAL # DSP 04-017**

By

**ANDRITZ-Ruthner, Inc.****Job No.: 1353****FACTORY:****ANDRITZ-Ruthner, Inc.**  
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Kevin Miller  
151 Chesterfield Industrial Blvd.  
Chesterfield, MO  
Phone: (636)-532-1600  
Fax (636) 532-5665**IMPORTANT**

This manual should be read in its entirety before attempting to install, operate or repair the equipment supplied by **ANDRITZ**. At least one copy must be kept in area of equipment installation and available to operators & maintenance personnel. Failure to follow the instructions contained herein could result in invalidation of warranties or injury to personnel.

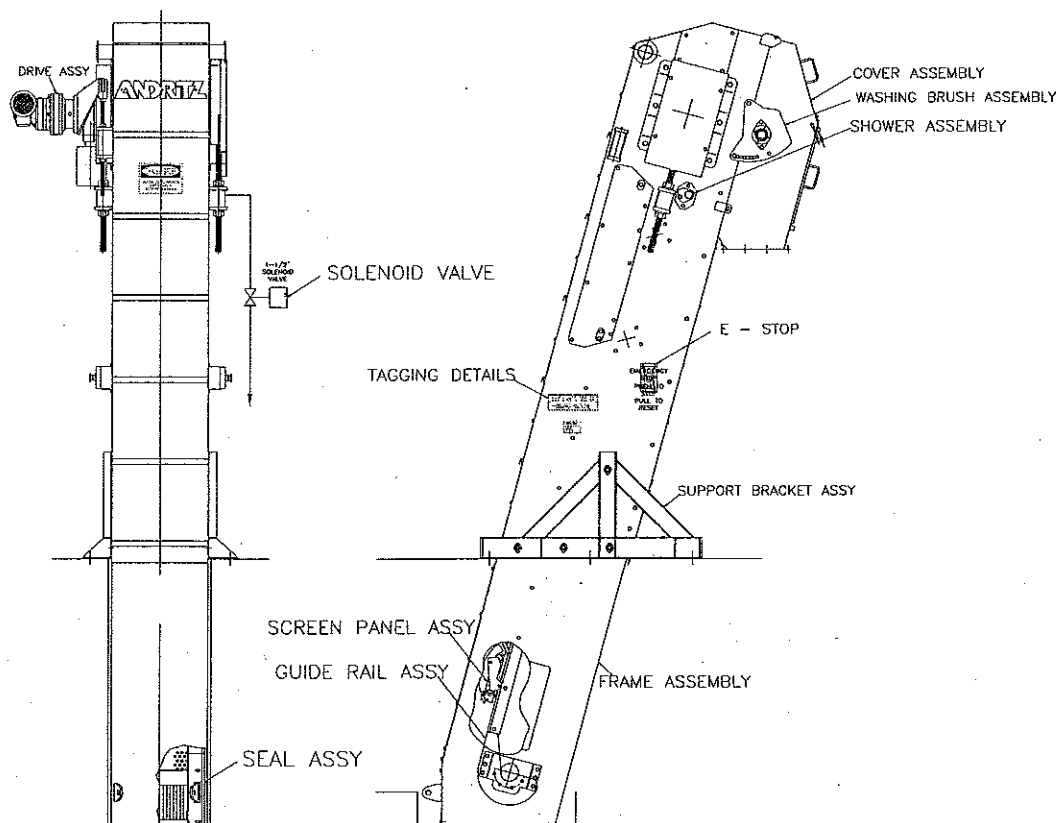
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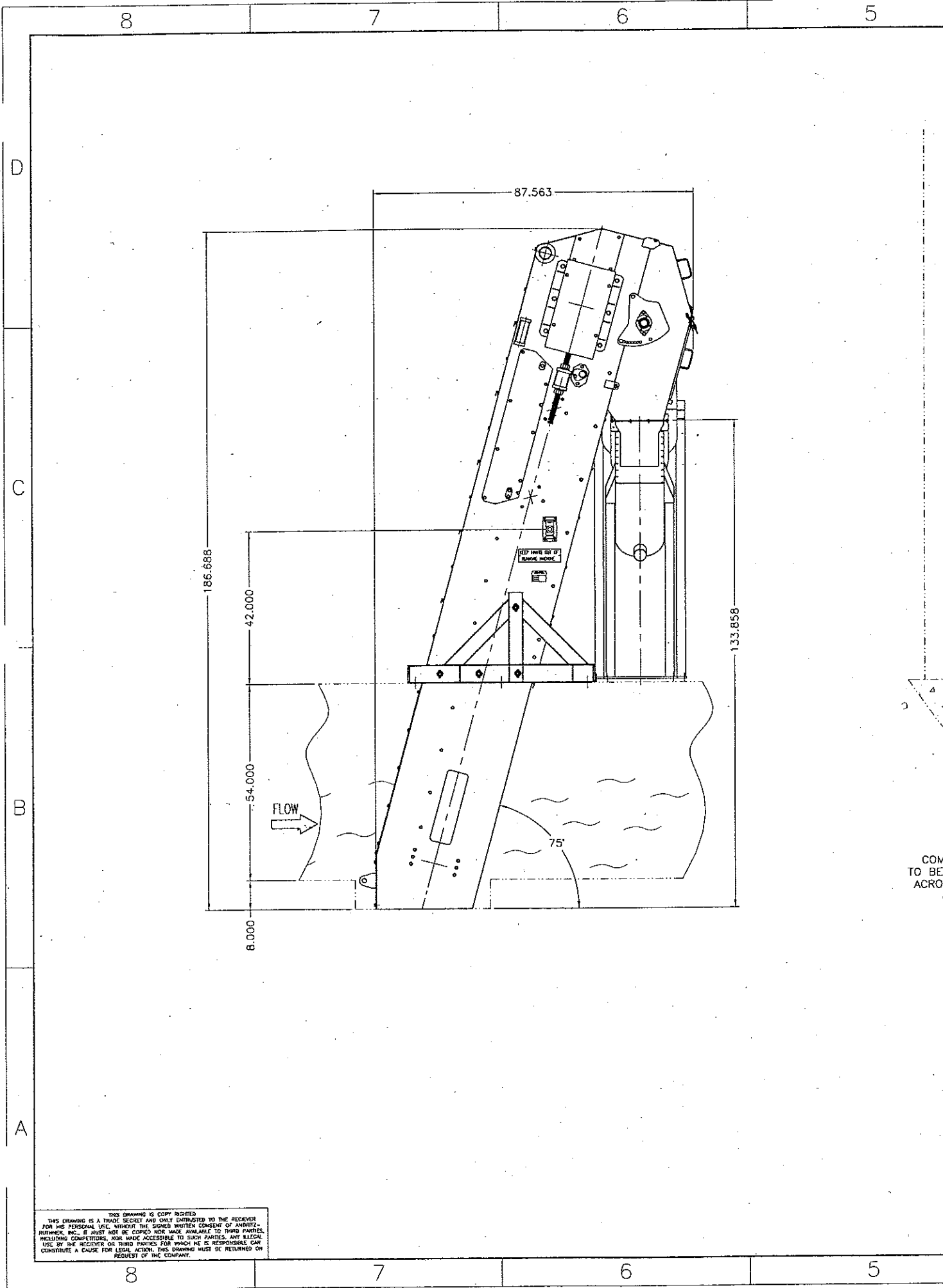
### 2. General Description of the Aqua-screen

The Andritz Aqua-screen is a continuous perforated plate system designed to extract solids from all types of channels. The flow capacity is dependent upon the screen width, perforation size, the open area of the perforated panels and the upstream level in the channel. Each screen is designed to suit the prevailing hydraulic conditions and can be operated either manually, on a timer or in fully automatic mode by use of level controls.

The Andritz Aqua-screen utilizes close fitting perforated plates to remove floating and suspended solids (screenings) in the effluent flow. The panels are shaped to form steps, which are carried on heavy duty chains protected from the ingress of debris by a bottom polyester bristle sealing brush, stainless steel side plates and polyurethane seals. The captured screenings are elevated from the effluent channel on the stepped perforated plates over the top of the Aqua-screen, and ejected through a totally enclosed discharge chute. Cleaning of the continuous perforated plate is done in two stages:-

1. Back washing using a high pressure spray bar (or low pressure deluge).
2. A rotating brush that removes any remaining debris, including fatty and fibrous material. The brush system is mounted on pivoting plates which are adjusted to compensate for wear. The tail end runner has no bearing and is made from a wear resistant material, requiring no maintenance. This means that maintenance is usually carried out above ground.





COMPACTOR  
TO BE SUPPORTED  
ACROSS CHANNEL  
(BY OTHERS)

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**1.1    MACHINE SPECIFICATIONS**  
**DSP 250 COMPACTOR****Overall Dimensions** (APPROX.)

Length: 153"                      Width: 20"                      Height: 24"  
Weight: 1780 lbs.

**Standard Materials**

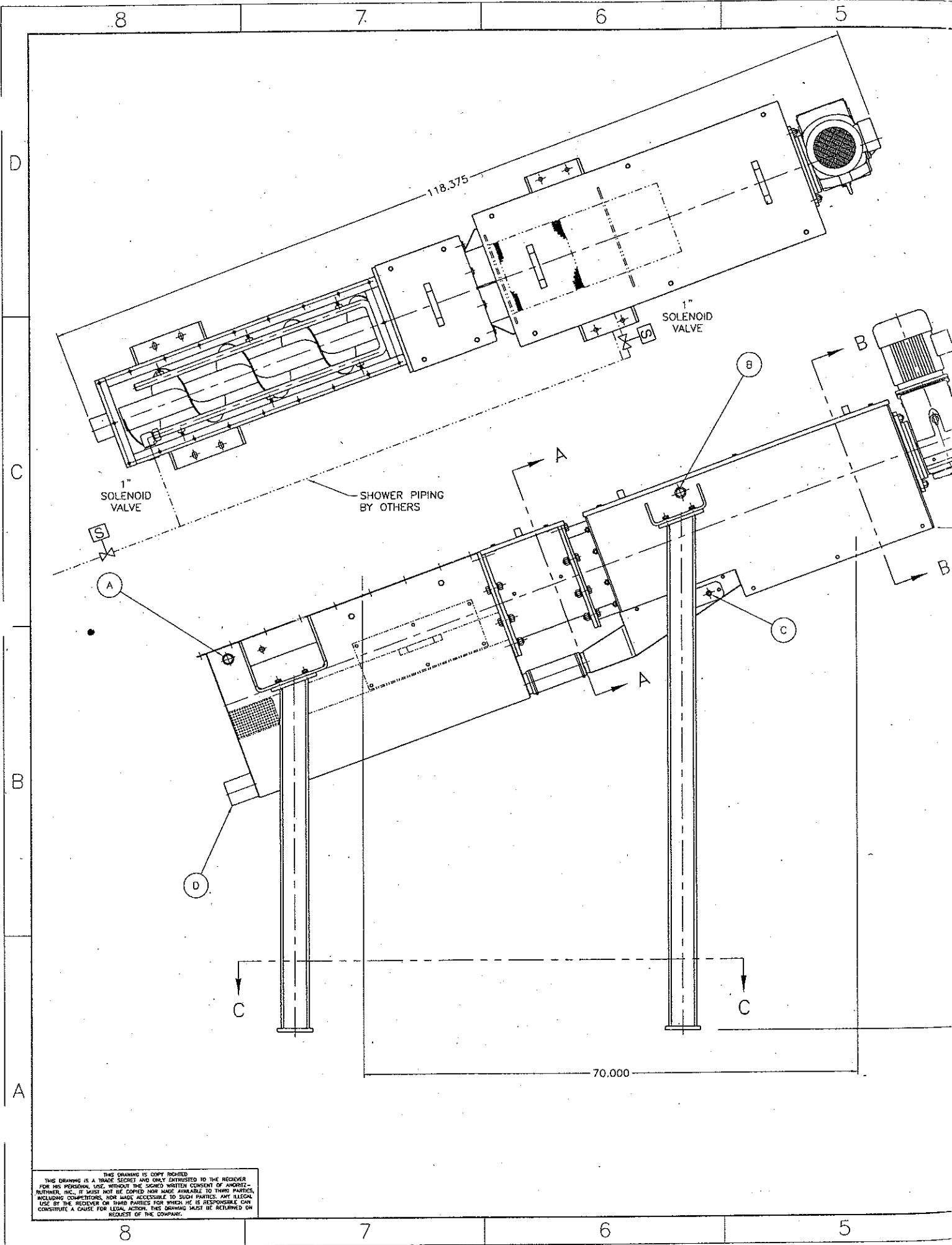
Trough Construction              Welded 12 ga. 316 ss.  
  
Screw Flighting:                      316 SS, 1/4". flight 2.00" dia. shaft.  
  
Drainer Section:                      1.5mm thick perforated 304 SS. Peeler jets. OD connection.  
  
Drive Unit:                              2HP motor 460V, 60 Hz 3 ph flanged to shaft-mounted  
                                                    FA77 gearbox, driving directly on end of shaft.  
  
Bearings - top end:                      Flanged housing: double-row spherical roller bearing.  
  
Pressing Section:                      Friction type.

**1.2    RECOMMENDED SPARES**

1 X BRSKF722517B bearing housing complete with 22217CCK bearing/W33

DMM22525    TROUGH LINER

Your **ANDRITZ** distributor can arrange for supply of **ANDRITZ** manufactured items.

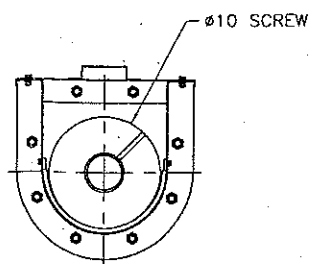
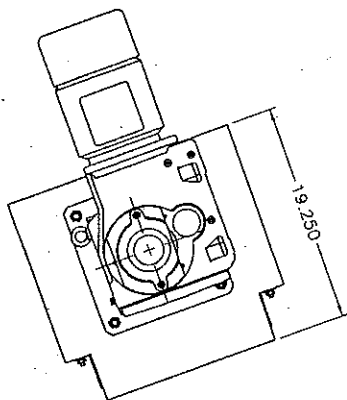


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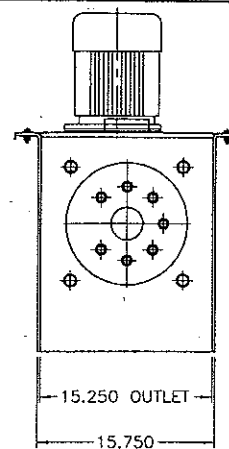
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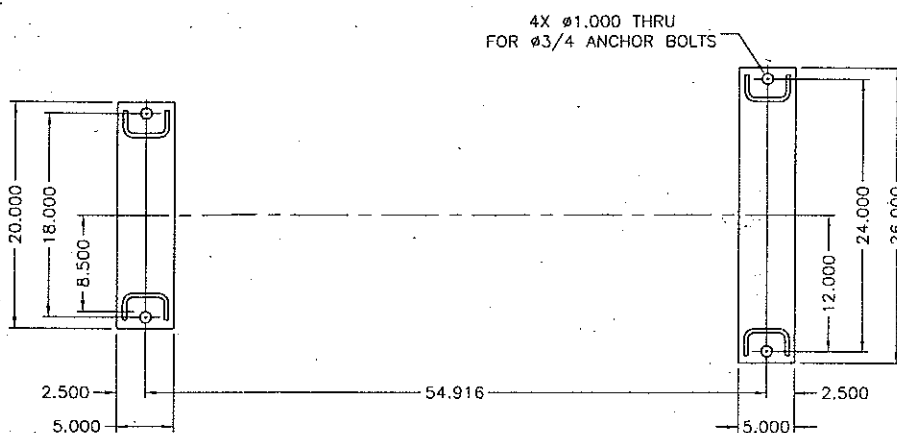
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SECTION A-A



SECTION B-B



SECTION C-C

## PIPING CONNECTIONS

PORT	SIZE	DESCRIPTION
A	1" FNPT	WASHER SECTION SHOWER
B	1" FNPT	COMPACTION SHOWER
C	1/4" FNPT	DRAIN PAN SHOWER
D	3" PIPE, SS	DRAIN

## GENERAL NOTES:

- FOUNDATION DESIGN AND CONSTRUCTION TO BE FURNISHED BY OTHERS.
- MINIMUM UTILITIES REQUIRED TO BE FURNISHED BY THE OPERATOR. THE FIGURES BELOW ARE FOR THE MACHINE ONLY. ANY ANCILLARY EQUIPMENT WILL REQUIRE ADDITIONAL UTILITIES.
  - SHOWER SYSTEMS:
    - WASHER SECTION: 15 GPM AT AMBIENT TEMPERATURE AND 60 PSIG.
    - PRESS SECTION: 5 GPM AT AMBIENT TEMPERATURE AND 60 PSIG.
    - DRIVE: 2 HP, 3 PH, 60 HZ, 230/460VAC
- MACHINE SPECIFICATIONS:
  - MATERIAL OF SCREEN CONSTRUCTION: 316L SST
  - CONNECTING PIPING MUST BE SELF SUPPORTING
  - USE SPREADER BARS WHEN LIFTING.
- CLEARANCE REQ'D. FOR MAINTENANCE: 36" PER SIDE UNLESS OTHERWISE SPECIFIED.
- SERIAL NUMBER: DSP04-017
- WEIGHT OF MACHINE : 1,780 LBS

1	NONE	CERTIFIED	MW	MW	02/25/04
REV	EIR	REVISION	BY	APVD	DATE

**ANDRITZ**  
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Telefax: (817) 472-8589

CERTIFIED CORRECT FOR INSTALLATION  
BY: WESTON DATE: 02/26/04  
PROJECT No. 1353

THESE DWGS. REFLECT CUSTOMER'S CHANGES  
AND APPROVAL ON PREVIOUS DWG. TRANSMITTALS

ESTIMATED WEIGHT IN LBS:  
UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES

FABRICATION TOLERANCES  
.XXX±.040 ANG±1° HOLE±.020

MACHINING TOLERANCES  
.XXX±.005 ANG±.5° HOLE±.020

WILL FINISH ALL OVER

DRAWN BY:  
LRV

CHECKED BY:  
MWW

APPROVED BY:  
MWW

DATE  
01/14/04

DATE  
02/02/04

THIRD  
ANGLE  
PROJECTION

**ANDRITZ**

ANDRITZ-RUTHNER, INC.  
1010 COMMERCIAL BLVD. SOUTH  
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TITLE  
BRANSON WWTP  
GENERAL ARRANGEMENT  
DSP-250A

SIZE  
D

DRAWING NUMBER  
M1353-3

SCALE  
1/8

FILE  
M1353-3

SHEET  
1 OF 1

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3

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